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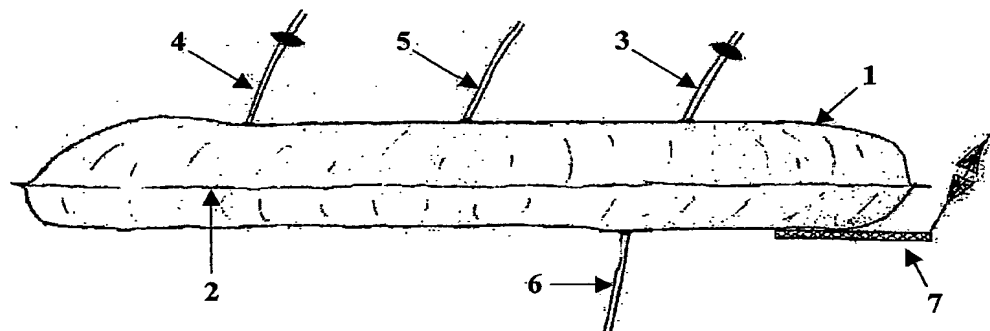
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(54) Title: **SYSTEM FOR CELL CULTURE**



(57) Abstract: The present invention provides a novel apparatus to grow cells or microorganisms where the cultivation chamber is partially filled with liquid cultivation medium and cells. The wave induction mechanism lifts up between 5 and 50 % of the length of the culture chamber. Mixing and aeration is achieved by inducing intermittently waves from one extremity of the bioreactor to the other. As the design of the invention is very simple, it is possible to manufacture it with flexible plastic material and use the apparatus as a disposable system. Moreover, such a mixing/aeration principle minimizes cell damages usually due to shear stress and small bubbles. Since the waves induction mechanism is very simple, it allows easy and efficient scale-up from small scale to a larger one. Such a large-scale, efficient and disposable culture system can largely reduce production costs.

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